



500.34077CC3/E2063-04EN

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant : Atsushi MAKI *et al.*

Serial No. : 09/900,144

Filed : 9 July 2000

For : OPTICAL SYSTEM FOR MEASURING  
METABOLISM IN A BODY AND IMAGING METHOD

Art Unit : 3737

Examiner : E.M. Mercader

Conf. No. : 6500

#9  
3B

**RESPONSE**

**RECEIVED**  
MAR 03 2004  
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**Mail Stop Non-Fee Amendment**  
Commissioner for Patents  
POB 1450  
Alexandria, Virginia 22313-1450

24 February 2004

Sir:

In response to the Office Action having a USPTO mailing date of 24 November 2003 in connection with the above-identified application, Applicant respectfully submits the following.

**DEFECTIVE OFFICE ACTION - BONA FIDE RESPONSE**

Applicant properly and timely filed a "Request For Corrected Office Action And Restart Of The Period For Response" with valid grounds for such Request *via* formal facsimile filing on 18 December 2004, in order to obtain at least substantial correction of the defective 24 November 2003 Action. In a teleconference held with Examiner Mercader on 24 February 2004, the Examiner stated that it was her opinion that the grounds given for such a Request were insufficient for unspecified

reasons, and that no corrected Action would be issued. In view of the fact that the 18 November Action is replete with defects and in view of the fact that Applicant has previously requested a corrected Action, Applicant respectfully submits that this Response is a *bona fide* attempt to reply to such defective Action, and that Applicant has attempted to address any and all outstanding matters herein.

#### **OVERLOOKED REQUEST FOR EXAMINER INTERVIEW NOTED**

The undersigned respectfully notes that both the Examiner has overlooked Applicant's written request for Examiner Interview before first Action as submitted in the Preliminary Amendment filed with the present application on 9 July 2001. Applicant and the undersigned respectfully renew such request for Examiner Interview, and respectfully submit that any continued failure to note Applicant's written request for an Examiner Interview may be discussed with persons of a higher supervisory role to the Examiner (*e.g.*, SPE, Group Director, etc.).

#### **REQUEST FOR ACKNOWLEDGMENT OF PRELIMINARY AMENDMENT**

In view of the fact that the 18 November 2003 Action is replete with defects which, for a substantial portion, do not reflect any of the changes or information submitted in the Preliminary Amendment filed with the present application on 9 July 2001, Applicant respectfully requests written acknowledgment of entry into the record of all of the changes and information submitted in the 9 July 2001 Preliminary Amendment in the next Communication mailed from the USPTO in this case.

More particularly, Applicant respectfully requests written acknowledgment of correction of the following matters of record.

**1. Pending Claims:**

Item 4 in the Office Action Summary incorrectly indicates that Claims 1-46 are pending in the present application. As indicated in the 9 July 2001 Preliminary Amendment, original Claims 1-27 were cancelled without prejudice or disclaimer, Claims 30, 31 and 33-38 were amended only to remove multiple dependency from those claims, and new Claims 39-46 were added only to reintroduce the subject matter cancelled with the multiple dependency. Therefore, only Claims 28-46 were pending for consideration and examination at the time of the Office Action, and therefore inclusion of Claims 1-27 in the claim count and rejections in the Office Action was improper. Written acknowledgment of the cancellation of Claims 1-27 again is respectfully requested.

**2. Priority Data:**

Item 13 in the Office Action Summary indicates that the claim of foreign priority under 35 USC §119 is acknowledged, but incorrectly indicates at 13c) that none of the priority documents have been received. Further, Item 15 in the Office Action Summary is blank, and does not acknowledge the claim for domestic priority under 35 USC §120. As indicated in the 9 July 2001 Preliminary Amendment, Applicant timely and properly claimed priority under 35 USC §119 of Japanese Patent Publications 06-242592 filed 6 October 1994, 07-030972 filed 20 February 1995 and 07-169820 filed 5 July 1995, and indicated that the certified copies of the priority documents had been filed in prior (original) application Serial No.

08/593,871, upon which domestic benefit also was claimed under 35 USC §120 in the 9 July 2001 Preliminary Amendment, and for which the specification of the present application was amended in the 9 July 2001 Preliminary Amendment to so identify, as well as the other such applications upon which domestic benefit was claimed. Further, Applicant stated in the 9 July 2001 Preliminary Amendment that verified English-language translations of all three priority documents had been filed in prior (parent) application Serial No. 09/203,610 on 16 November 2000, and requested acknowledgment of the perfection of the claim for foreign priority under 35 USC §119. Therefore, the indication of non-receipt of the priority documents and non-acknowledgment of the claim for domestic benefit under 35 USC §120 were improper. Written acknowledgment of the perfection of the claim for foreign priority under 35 USC §119 and the claim for domestic benefit under §120 again are respectfully requested.

### **3. Abstract:**

Item 2 on page 2 of the Office Action indicates that the Abstract is objected to for exceeding 150 words. Attached as an Appendix to the 9 July 2001 Preliminary Amendment, Applicant indicated amendments to the Abstract to reduce the Abstract to a count of exactly 140 words. Therefore, the objection to the Abstract is improper, and Applicant respectfully requests withdrawal thereof.

### **CONTINUATION APPLICATION - DOUBLE PATENTING PROHIBITED**

Regarding the present continuation application filed to pursue subject matter identical to or consonant with the restriction/election subject matter not elected in

prior Application No. 09/149,155 (issued as US 6,128,517 A), it is respectfully submitted that the double patenting rejection between this case and the related application which matured to US 6,128,517 B1 is wholly improper and invalid since in that prior application, original Claims 28-39, which are the precise same claims now pending in the present application, **were cancelled as being withdrawn from consideration by an election of species** made with traverse on 27 July 1999 in response to a telephone request by Examiner Eric F. Winakur, and such election was of record in that case. Therefore, **the double patenting rejection of the pending claims based on US 6,128,517 B1 is wholly improper and invalid** as a rejection of restricted claims under 35 USC §121, and Applicant respectfully requests withdrawal of the rejection at Item 7 on page 3 of the Office Action, of Claims [1-27] 28-46 as being unpatentable over US 6,128,517 A.

#### **DOUBLE PATENTING REJECTION - TRAVERSED/NOT SUPPORTED**

The non-statutory double patenting rejections at Items 4-8 are respectfully **traversed** because such rejections do not provide **any factual analysis whatsoever, let alone the factual analysis required** for such rejections under U.S. patent law, *i.e.*, **the Examiner has not satisfied any initial burden to support the rejections, let alone adequately support such rejections.** More particularly, MPEP

§804 states:

Since the analysis employed in an obviousness-type double patenting determination parallels the guidelines for a 35 USC 103(a) rejection, the factual inquiries set forth in *Graham v. John Deere Co.*, 383 US 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 USC 103 are employed when making an obviousness-type

double patenting analysis. These factual inquiries are summarized as follows:

- (A) Determine the scope and content of a patent claim and the prior art relative to a claim in the application at issue;
  - (B) Determine the differences between the scope and content of the patent claim and the prior art as determined in (A) and the claim in the application at issue;
  - (C) Determine the level of ordinary skill in the pertinent art;
- and
- (D) Evaluate any objective indicia of non-obviousness.

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Any obviousness-type double patenting rejection should make clear:

- (A) The differences between the invention defined by the conflicting claims - a claim in the patent compared to a claim in the application; and
- (B) The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim in issue is an obvious variation of the invention defined in a claim in the patent.

The rejections do not make clear any differences whatsoever, or any reasons whatsoever, let alone the differences and reasons required by such rejections, as to why a person of ordinary skill in the art would conclude that the invention defined in the claims at issue is an obvious variation of the invention defined in the claims in the patent. Accordingly, Applicant respectfully requests the Examiner to satisfy her initial burden to support the rejections, or such rejections should be withdrawn.

Furthermore, Applicant also traverses the rejections as improper and unsupported for the following reasons as set forth in the Request For Corrected Office Action And Restart Of The Period For Response filed 18 December 2003, the contents of which are incorporated herein by reference in their entirety.

Firstly, at Item 4 on page 2 of the Office Action, Claims [1-27] 28-46 are rejected as being unpatentable over US 6,611,698 B1; at Item 5 on page 3 of the

Action, Claims [1-27] 28-46 are rejected over US 6,542,763 B1; and at Item 8 on page 3 of the Action, Claims [1-27] 28-46 are rejected over US 5,678,556 A. Other than sharing either a common inventor or a common Assignee with the present case, no relationship has been proven between any one or all of these patents and even the subject matter of the present application, let alone between any limitations of the claims in the cited patents and the features/limitations recited in pending Claims 28-46 in this case. Therefore, Applicant respectfully requests that such patents be proven to be related to the present application by more than merely a common inventor and/or common Assignee, or such unsupported rejections be withdrawn. Insofar as such rejections based on unrelated patents are concerned, Applicant respectfully declines to offer arguments or formally disclaim any portion of the present application absent the required factual determination of such rejections.

Secondly, the solitary ground identical in all of the double patenting rejections is the recitation of the language of the rule. Other than a mere recitation, no other reasoning, analysis or grounds are given in any of the rejections. Applicant respectfully STRONGLY traverses such a generalized and ungrounded statement, and respectfully declines to offer arguments or formally disclaim any portion of the present application absent the required factual determination of such rejections.

In addition to the foregoing, the following additional remarks from Applicant's foreign representative also are submitted in support of traversal of the rejections and patentability of Applicant's claims.

Initially, it is noted that (1) the foreign applications upon which US 6,611,698 B1 and US 6,542,763 B1 claim priority under 35 USC §119 were filed subsequent to

the filing dates of all of the JP applications upon which priority has been perfected in the present case under §119, and (2) the US applications from which US 6,611,698 B1 and US 6,542,763 B1 matured have filing dates subsequent to the US filing date of original prior Application No. 08/539,871, upon which domestic benefit has been claimed in this case under 35 USC §120. Therefore, US 6,611,698 B1 and US 6,542,763 B1 do not qualify and cannot be cited, to reject any claims in this application, and Applicant respectfully requests all rejections based thereon be withdrawn.

An important object of the present invention is to resolve the third problem described on page 5 of the specification, that is, to say, it is to discriminate any change in hemodynamic movement due to an overall change in the living body from a hemodynamic change in the living body due to a local change in the living body.

On the other hand, the main stated object of US 5,678,556 A is to provide a device for finding three-dimensional spatial distributions of concentrations of absorbers functioning in a human body to form an image (see, *e.g.*, Column 3, lines 2-5 and Column 1, line 67 through Column 2, line 1).

Moreover, as illustrated in FIG. 15 and described in the present specification, in order to obtain difference signals which reflect only a change in hemodynamic movement at the local region 215, the light is irradiated on a subject 206 by way of a light irradiation position 205. Two signals are detected by two photodetectors 210a and 210b, and a difference signal between the two signals is obtained.

On the other hand, there is no claimed structure in US 5,678,556 A for obtaining any difference signal.



As a result of the foregoing, Applicant respectfully submits that the cited art has not been shown to support any of the double patenting rejections made, and therefore, reconsideration and withdrawal of all of the double patenting rejections are respectfully requested.

Further, at this point, it is respectfully submitted as a reminder that, if new art is now cited against any of Applicant's unamended claims, then it would not be proper to make a next Action final.

#### **RESERVATION OF RIGHTS**

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present application are without prejudice or disclaimer of any scope or subject matter. Further, Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, *i.e.*, Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

#### **EXAMINER INVITED TO TELEPHONE**

The Examiner is invited to telephone the undersigned at the local D.C. area telephone 703-312-6600, to discuss an Examiner's Amendment or other suggested action for accelerating prosecution and moving the present application to allowance.

### CONCLUSION

In view of the foregoing remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

This Response is being submitted within the shortened statutory period set by the 24 November 2003 Office Action, and therefore, no Petition or fee are required. To whatever other extent is actually appropriate and necessary, Applicant respectfully petitions the Commissioner for an extension of time under 37 CFR §1.136. Please charge any actual required shortage in the fees to ATS&K Deposit Account No. 01-2135 (referencing Case No. 500.34077CC3).

Respectfully submitted,



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